FACT SHEET

FINAL AMENDMENTS TO AIR TOXICS STANDARDS FOR PETROLEUM REFINERIES

ACTION

- On January 16, 2009 the Environmental Protection Agency (EPA) issued final amendments to the air toxics standards for petroleum refineries. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.

- This action amends the standards for petroleum refineries to add maximum achievable control technology (MACT) standards for heat exchange systems. We identified heat exchangers as a significant source of air toxics emissions. The final rule requires refineries to implement a leak detection and repair program for heat exchangers.

- The action also addresses the risk remaining after application of the MACT standards. The agency found risks to be acceptable.

- In addition, this action provides the results of EPA's 8-year review of developments in practices, processes, and control technologies that have occurred during that time. The final rule requires certain storage vessels located at petroleum refineries to add equipment to reduce the evaporation of gasoline and other refined products.

- Existing refineries must comply within three years, although an additional year is allowed if necessary to install controls.

HEALTH AND ENVIRONMENTAL BENEFITS AND COSTS

- EPA judges the level of risk in the current refinery rule to be acceptable. The final risk assessment predicts the highest maximum individual lifetime cancer risk for all of the refineries at 30-in-1 million. The Agency estimates that the total annual cancer incidence for the exposed population to be 0.05 cases per year or one case every 20 years.

- The promulgated amendments will achieve a nationwide hazardous air pollutant emission reduction of about 2,300 tons per year (tpy) with a concurrent reduction in volatile organic compound emissions of about 19,000 tpy.

- This action will result in a nationwide savings of $3.4 million due to reductions in product losses. Only one corporation would incur net costs, and these costs would not result in any adverse economic impacts.

BACKGROUND

- The Clean Air Act requires EPA to regulate toxic air pollutants from large industrial facilities in two phases.

- The first phase is "technology-based," where EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or source categories). The standards for large sources are know as maximum achievable control technology (MACT) standards, and are based on emissions levels that are already being achieved by the better-controlled and lower-emitting sources in an industry.

- EPA finalized the petroleum refinery MACT standards in August of 1995. EPA estimates that the 1995 standards reduce nationwide emissions of air toxics from petroleum refineries by 53,000 tons per year.

- In the second phase, the law requires EPA to review the technology-based standards and revise them, if necessary, to account for improvements in air pollution controls and/or prevention. The law directs EPA to repeat this assessment every 8 years.

- During the second phase of the program, EPA also is required to assess the remaining health risks from each industry group for which it has set MACT standards and determine whether more health-protective standards are necessary.

- EPA initially proposed to revise the 1995 rule in August 2007. EPA issued a supplemental proposal in October 2008 based on information received since the initial proposal.

FOR MORE INFORMATION

- To download a copy the final rule, go to http://www.epa.gov/ttn/oarpg/t3pfpr.html

- For further information about the final rule, contact Mr. Robert Lucas of EPA's Office of Air Quality Planning and Standards at (919) 541-0884 or lucas.bob@epa.gov.